

WHAT IS CLAIMED IS:

SUB A' →

1. An apparatus for supplying a data stream, said apparatus comprising:  
means for obtaining a maximum bit rate of said data stream;  
means for setting a transmission band width in accordance with the  
maximum bit rate of said data stream; and  
means for outputting said data stream within the set band width.
2. An apparatus according to claim 1, wherein said data stream conforms to a  
MPEG standard.
3. An apparatus according to claim 2, wherein said data stream is a partial  
transport stream.
4. An apparatus according to claim 1, wherein the outputting means outputs  
said data stream in accordance with an IEEE1394 digital interface standard.
5. An apparatus according to claim 1, wherein the outputting means includes  
means for outputting information indicative of said maximum bit rate.
6. A method for supplying a data stream, said method comprising the steps  
of:  
obtaining a maximum bit rate of said data stream;  
setting a transmission band width in accordance with the maximum bit  
rate of said data stream; and  
outputting said data stream within the set band width.
7. A method according to claim 6, wherein said data stream conforms to a  
MPEG standard.
8. A method according to claim 7, wherein said data stream is a partial  
transport stream.

9. A method according to claim 6, wherein the outputting step outputs said data stream in accordance with an IEEE1394 digital interface standard.
10. A method according to claim 6, further comprising the step of outputting information indicative of said maximum bit rate.
11. An apparatus for reproducing data from a recording medium, said apparatus comprising:
- means for reproducing a data stream from said recording medium;
  - means for obtaining maximum bit rate information of said data stream;
  - means for setting a transmission band width in accordance with information indicative of the maximum bit rate of said data stream; and
  - means for outputting said data stream within the set band width.
12. An apparatus according to claim 11, further comprising means for providing control information indicative of the transmission band width based on the information indicative of said maximum bit rate information.
13. An apparatus according to claim 11, further comprising time stamp separation means for separating a time stamp from said data stream, clock generating means for generating a reference clock signal and for counting pulses thereof, comparison means for comparing said time stamp and the counted pulse value, and output control means for controlling the output of said data stream in response to a comparison result from said comparison means.
14. An apparatus according to claim 11, wherein the reproducing means includes means for reproducing information indicative of a receiving-side leak buffer size.
15. An apparatus according to claim 11, wherein the reproducing means includes means for reproducing information indicative of a receiving-side leak buffer output bit rate.

16. An apparatus according to claim 11, wherein the reproducing means includes means for reproducing broadcasting provider information.
17. A method for reproducing data from a recording medium, said method comprising the steps of:
- reproducing a data stream from said recording medium;
  - obtaining maximum bit rate information of said data stream;
  - setting a transmission band width in accordance with information indicative of the maximum bit rate of said data stream; and
  - outputting said data stream within the set band width.
18. A method according to claim 17, further comprising the step of providing control information indicative of the transmission band width based on the information indicative of said maximum bit rate information.
19. A method according to claim 17, further comprising the steps of separating a time stamp from said data stream, generating a reference clock signal and counting pulses thereof, comparing said time stamp and the counted pulse value, and controlling the output of said data stream in response to the comparison result.
20. A method according to claim 17, wherein the reproducing step includes reproducing information indicative of a receiving-side leak buffer size.
21. A method according to claim 17, wherein the reproducing step includes reproducing information indicative of a receiving-side leak buffer output bit rate.
22. A method according to claim 17, wherein the reproducing step includes reproducing broadcasting provider information.
23. An apparatus for recording data on a recording medium, said apparatus comprising:
- receiving means for receiving a data stream;

means for obtaining a maximum bit rate of said data stream; and  
recording means for recording said data stream and information indicative  
of said maximum bit rate on said recording medium.

24. An apparatus according to claim 23, further comprising buffer means for  
temporarily storing the received data stream and controlling said recording means  
so as to stop recording of said data stream when said buffer means is empty.

25. An apparatus according to claim 23, wherein the obtaining means includes  
means for obtaining receiving-side leak buffer size, and said recording means  
records information indicative of said receiving-side leak buffer size.

26. An apparatus according to claim 23, wherein the obtaining means includes  
means for obtaining receiving-side leak buffer output bit rate, and said recording  
means records information indicative of said receiving-side leak buffer output bit  
rate.

27. An apparatus according to claim 23, wherein the obtaining means includes  
means for obtaining broadcasting provider information, and said recording means  
records information indicative of said broadcasting provider information.

28. An apparatus according to claim 23, wherein the data stream received by  
said receiving means is a partial data stream representing a selected program.

29. An apparatus according to claim 28, further comprising means for  
obtaining a standard reference time of the received partial data stream, means for  
generating a time stamp synchronous with the obtained standard reference time,  
and means for adding said time stamp to said partial data stream.

30. A method for recording data on a recording medium, said method  
comprising the steps of:

receiving a data stream;

obtaining a maximum bit rate of said data stream; and

recording said data stream and information indicative of said maximum bit rate on said recording medium.

31. A method according to claim 30, further comprising temporarily storing the received data stream in a buffer and controlling said recording step so as to stop recording of said data stream when said buffer is empty.

32. A method according to claim 30, wherein the obtaining step includes obtaining receiving-side leak buffer size, and the recording step records information indicative of said receiving-side leak buffer size.

33. A method according to claim 30, wherein the obtaining step includes obtaining receiving-side leak buffer output bit rate, and the recording step records information indicative of said receiving-side leak buffer output bit rate.

34. A method according to claim 30, wherein the obtaining step includes obtaining broadcasting provider information, and the recording step records information indicative of said broadcasting provider information.

35. A method according to claim 30, wherein the received data stream is a partial data stream representing a selected program.

36. A method according to claim 35, further comprising the steps of obtaining a standard reference time of the received partial data stream, generating a time stamp synchronous with the obtained standard reference time, and adding said time stamp to said partial data stream.

37. A system for recording and reproducing data onto and from a recording medium, said system comprising:

receiving means for receiving a data stream;

means for obtaining a maximum bit rate of said data stream;

recording means for recording said data stream and information indicative of said maximum bit rate on said recording medium;

means for reproducing said data stream and said information indicative of said maximum bit rate from said recording medium;

means for setting a transmission band width in accordance with the reproduced information indicative of said maximum bit rate; and

output means for outputting said data stream within the set band width.

38. A system according to claim 37, further comprising decoding means for decoding said data stream outputted by said output means.

39. A system according to claim 38, further comprising means for extracting a selected program from broadcasting information and for providing the extracted program as said data stream.

40. A system according to claim 39, further comprising means for obtaining a standard reference time of the received data stream, means for generating a time stamp synchronous with the obtained standard reference time, and means for adding said time stamp to said data stream.

41. A method for recording and reproducing data onto and from a recording medium, said method comprising the steps of:

receiving a data stream;

obtaining a maximum bit rate of said data stream;

recording said data stream and information indicative of said maximum bit rate on said recording medium;

reproducing said data stream and said information indicative of said maximum bit rate from said recording medium;

setting a transmission band width in accordance with the reproduced information indicative of said maximum bit rate; and

outputting said data stream within the set band width.

42. A method according to claim 41, further comprising the step of decoding the outputted data stream.
43. A method according to claim 42, further comprising extracting a selected program from broadcasting information and providing the extracted program as said data stream.
44. A method according to claim 43, further comprising the steps of obtaining a standard reference time of the received data stream, generating a time stamp synchronous with the obtained standard reference time, and adding said time stamp to said data stream.
45. A recording medium comprising a recordable data region for storing a data stream and information indicative of a maximum bit rate of said data stream, wherein the maximum bit rate is obtained during a recording operation.
46. A recording medium according to claim 45, wherein information indicative of a receiving-side leak buffer size is stored in said recordable data region.
47. A recording medium according to claim 45, wherein information indicative of a receiving-side leak buffer output bit rate is stored in said recordable data region.
48. A recording medium according to claim 45, wherein broadcasting provider information is stored in said recordable data region.
49. An apparatus for supplying a data stream, said apparatus comprising:  
a circuit which obtains a maximum bit rate of said data stream;  
an adapter which sets a transmission band width in accordance with the maximum bit rate of said data stream; and  
a circuit which outputs said data stream within the set band width.

50. An apparatus according to claim 49, wherein said data stream conforms to a MPEG standard.

51. An apparatus according to claim 50, wherein said data stream is a partial transport stream.

52. An apparatus according to claim 49, wherein the output circuit outputs said data stream in accordance with an IEEE1394 digital interface standard.

53. An apparatus according to claim 49, wherein the output circuit includes a circuit which outputs information indicative of said maximum bit rate.

54. An apparatus for reproducing data from a recording medium, said apparatus comprising:

a circuit which reproduces a data stream and maximum bit rate information of said data stream from said recording medium;

an adapter which sets a transmission band width in accordance with information indicative of the reproduced maximum bit rate of said data stream; and

a circuit which outputs said data stream within the set band width.

55. An apparatus according to claim 54, further comprising a circuit which provides control information indicative of the transmission band width based on the information indicative of said maximum bit rate information.

56. An apparatus according to claim 54, further comprising a time stamp separation circuit which separates a time stamp from said data stream, a clock generating and counter circuit which generates a reference clock signal and counts pulses thereof, a comparison circuit which compares said time stamp and the counted pulse value, and an output control circuit which controls the output of said data stream in response to a comparison result from said comparison circuit.

57. An apparatus according to claim 54, wherein the reproducing circuit reproduces information indicative of a receiving-side leak buffer size.
58. An apparatus according to claim 54, wherein the reproducing circuit reproduces information indicative of a receiving-side leak buffer output bit rate.
59. An apparatus according to claim 54, wherein the reproducing circuit reproduces broadcasting provider information.
60. An apparatus for recording data on a recording medium, said apparatus comprising:
- a receiving terminal which receives a data stream;
  - a rate obtaining circuit which obtains a maximum bit rate of said data stream; and
  - a recording circuit which records said data stream and information indicative of said maximum bit rate on said recording medium.
61. An apparatus according to claim 60, further comprising a buffer which temporarily stores the received data stream and controls said recording circuit so as to stop recording of said data stream when said buffer is empty.
62. An apparatus according to claim 60, further comprising an analysis circuit which obtains receiving-side leak buffer size, and wherein said recording circuit records information indicative of said receiving-side leak buffer size.
63. An apparatus according to claim 60, further comprising an analysis circuit which obtains receiving-side leak buffer output bit rate, and wherein said recording circuit records information indicative of said receiving-side leak buffer output bit rate.
64. An apparatus according to claim 60, further comprising an analysis circuit which obtains broadcasting provider information, and wherein said recording circuit records information indicative of said broadcasting provider information.

65. An apparatus according to claim 60, wherein the data stream received by said receiving terminal is a partial data stream representing a selected program.

66. An apparatus according to claim 65, further comprising an analysis circuit which obtains a standard reference time of the received partial data stream, a phase-locked loop and time stamp generation circuit which generates a time stamp synchronous with the obtained standard reference time, and a time stamp addition circuit which adds said time stamp to said partial data stream.

67. A system for recording and reproducing data onto and from a recording medium, said system comprising:

- a receiving terminal which receives a data stream;

- a rate calculation circuit which obtains a maximum bit rate of said data stream;

- a recording circuit which records said data stream and information indicative of said maximum bit rate on said recording medium;

- a reproducing circuit which reproduces said data stream and said information indicative of said maximum bit rate from said recording medium;

- an adapter which sets a transmission band width in accordance with the reproduced information indicative of said maximum bit rate; and

- an output circuit which outputs said data stream within the set band width.

68. A system according to claim 67, further comprising a decoding device which decodes said data stream outputted by said output circuit.

69. A system according to claim 68, further comprising a device which extracts a selected program from broadcasting information and provides the extracted program to the receiving terminal as said data stream.

70. A system according to claim 69, further comprising an analysis circuit which obtains a standard reference time of the received data stream, a phase-

looked loop and time generation circuit which generates a time stamp  
synchronous with the obtained standard reference time, and a time stamp addition  
circuit which adds said time stamp to said data stream.

SECRET 6946460